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BY EXPRESS MAIL

December 18, 1990 5HS-11

Peter Vagt
Warzyn Engineering Inc.
435 Devon Park Drive
Suite 702
Wayne, PA 19087

Re: Results of Risk Assessment Meeting - December 17, 1990 - ACS NPL Site - Griffith, Indiana

Dear Dr. Vagt:

This letter is a follow-up to a meeting held December 17, 1990 between USEPA and Warzyn to discuss the management of tentatively identified compounds (TICs) and Warzyn's proposed procedure for addressing the large volume of TICs found at the ACS site.

Attending the meeting were Peter Vagt (Warzyn's project coordinator), Kevin Domack (Warzyn toxicologist), John Dadisman (Warzyn environmental chemist), Pat Van Leeuwen (USEPA toxicologist) and Robert Swale (USEPA RPM).

At the beginning of the meeting, John Dadisman presented the most-recent list of TICs, which were categorized based upon similar chemical structure. The original TIC list, which contained nearly 400 compounds was broken down into 45 groups each of which was represented by one compound.

Peter Vagt presented a flowchart which represented the decision making process for the groupings and the assignment of toxicity values to the TICs. Pat Van Leeuwen said that the flowchart should be placed in the text of the Risk Assessment Report to explain the logic behind the process of assigning toxicity values to the TICs.

Warzyn then summarized their approach to managing the large number of TICs. The following paragraphs summarize their discussion.

The majority of the groups are similar enough in structure to be represented by a TCL compound. Those groups which did not have an obvious connection to a TCL compound, were assigned to a known compound whose structure was the most similar to the group.

In circumstances where more than one compound with known toxicity values represented the group, the group would be represented by the compound with the worst case toxicity value.

Each group which contains known or suspected carcinogens will be represented by a compound which is also a known or suspected carcinogen. The exception to this was the case of Azobenzene which is a known carcinogen but was found in one location at a low concentration. The group it is included in, is represented by a non-carcinogen. However the risk presented by Azobenzene as compared to the non-carcinogen representative of the group is insignificant and the group is better represented by the non-carcinogen.

Those compounds which are unknown have been represented by compounds known at the site, which are more significant to the overall risks posed by the site.

Group #1 of the Polynuclear Aromatics will be classified as PAHs for the purposes of the Risk Assessment.

A compound's presence, in terms of it concentration, will only be included in the risk calculation for a media, if that compound has a frequency of detection greater than 5% in that respective media. The exception to this rule, would be the case where a compound has a high frequency of detection in one media and conceivably could affect another media which has a frequency of detection below the threshold of 5 percent. If this occurs, the compound should be included in the risk calculation for the media which has less than five percent frequency of detection. For example, if a compound has a frequency of detection of 60 percent in soil but is present less than 5 percent of the time in groundwater, the risk calculation for groundwater should include the compound, since it is probable/possible that the compound is leaching into the groundwater from the contaminated soil.

As a short follow-up to our conference call of the previous week, we re-discussed the exposure assumptions which were not included in Kevin Domack's list of proposals provided to Pat Van Leeuwen, prior to the teleconference of December 10th. The EA should include the current uses of the upper aquifer for utility uses such as gardening, household uses and for recreational uses such as swimming pools. It was also reaffirmed by Pat Van Leeuwen that current uses means the current land use scenario for the site and its adjoining properties. The scenario generally being the situation which would occur if no action were taken at the site given the current land use of the area.

Future land use scenarios would include the assumption that property owners placed wells within the current site boundary for use as a potable water supply.

In other points of discussion, Pat Van Leeuwen said she would provide Kevin Domack with any toxicity values she had available which were not provided by any other sources.

When calculating the risk for a media for organic compounds, the exposure route with the highest toxicity value should be used to calculate the exposure for the compound and the media. For metals and inorganics, the oral ingestion toxicity value for water should be used.

Skin permeability constants should assume the permeability constant for a pure compound and not assume water acts as a cosolvent.

Three adsorption routes should be used for each risk calculation. They are: oral, dermal and permeability constants.

In closing the meeting, it was agreed that ECAO would be advised of the proposed method for managing the voluminous amount of TICs at the site. It was understood that some additional suggestions may be made by ECAO. However, if EPA did not contact Warzyn by close of business December 19, 1990, then Warzyn should proceed with their TIC management methodology so that the risk assessment process could proceed as scheduled.

Overall, I believe that the meeting was very productive. As you know, we are committed to providing our assistance keeping in mind our respective roles, to help you assemble a quality document. If you have any questions, please call do not hesitate to call me at (312) 886-5116.

Sincerely,

Robert E. Swale
Remedial Project Manager

cc: Pat Van Leeuwen, TSU
Reginald Baker, IDEM